You own a company which provides airport service in a large city. It is time for you to purchase new vans to replace some in your fleet. You have narrowed your choice down to the Honda Odyssey and the Toyota Sienna. Your research tells you that a new Odyssey with your desired features costs $27,560 and depreciates at a rate of 10.65% per year. A new Sienna costs $25,675 and depreciates about $1828 per year.

1. Write a function H(t), which gives the market value of the Odyssey t years after you have bought it
2. Write S(t), which gives the market value of the Sienna t years after you have bought it
3. What are H(5) and S(5)? Interpret the meaning of these results
4. It is the policy of your company to sell vans once the market value has fallen below $10,000. How long will it take for the Honda Odyssey to depreciate to this value? Solve algebraically, then use your calculator to estimate the answer to the nearest hundredth. Record exactly what you entered into your calculator.
5. How long will it take for the Toyota Sienna to depreciate to a market value of $10000? Set up the equation you would use and solve this problem using any method you wish.
6. Determine when the value of the Honda and the value of the Toyota are the same. Show the equation you would use to solve this problem and use any method to solve it. Explain your steps.
7. Which van would you recommend? Support your answer.